Amendments to the Claims:

The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-13 (cancelled).

14. (new) A switching arrangement having:

a cross bar;

a plurality of ingress means connected to an input side of the cross-bar;

a plurality of egress means connected to an output side of the cross-bar, each ingress means including an ingress schedule storing means for storing a plurality of transmission queue identities, and each egress means including an egress schedule storing means for storing a plurality of ingress identities;

a management card which is adapted to transmit configuration primitives to each of the plurality of ingress means and to each of the plurality of egress means, the configuration primitives providing updated entries for the ingress and egress schedule storing means;

ingress pointer means for referencing one of said stored plurality of transmission queue identities; and

egress pointer means for referencing one of said stored plurality of ingress identities from which data is to be received to manage the contents of each ingress schedule storing means and each egress schedule storing means;

whereby at each cell transmit time, a cell transmitted from a referenced transmission queue in the ingress means is received at said egress means from said referenced ingress identity.

15.   (new) The apparatus according to claim 14, further comprising for each ingress means a calculating means for calculating cross-bar rates required at each egress means.

16.   (new) The apparatus according to claim 15, wherein calculating means calculates said cross-bar rates, calculated according to current traffic load and quality of service required.

17.   (new) A method of routing data using a switching arrangement comprising a cross bar, a plurality of ingress means, each including ingress schedule storing means, a plurality of egress means, each including an egress schedule storing means, and a management card, said method comprising:

a)   storing a plurality of transmission queue identities in each ingress schedule storing means;

b) storing a plurality of ingress identities in each egress schedule storing means;

c) transmitting configuration primitives from the management card to each of the plurality of ingress means and to each of the plurality of egress means, the configuration primitives providing updates entries for the ingress and egress schedule storing means;

d) managing contents of each ingress schedule storing means and each egress schedule storing means by providing ingress pointer means to reference one of said stored plurality of transmission queue identities and egress pointer means to reference one of said stored plurality of ingress identities from which data is to be received; and

e) at each cell transmit time, transmitting a cell from a referenced transmission queue in the ingress means and receiving the cell at said egress means from said referenced ingress identity.

18. (new) A method according to claim 17, wherein step e) further comprises moving said ingress pointer and said egress pointer to a next location.

19. (new) The method according to claim 18, wherein step e) further comprises, when each pointer has reached a last location, moving to a first location.

20.   (new) The method according to claim 19, wherein step d) comprises, for each ingress means, calculating cross-bar rates required at each egress means.

21.   (new) The method according to claim 20, wherein said cross-bar rates are calculated according to current traffic load and quality of service required.

22.   (new) The method according to claim 21, wherein step d) further comprises calculating corresponding ingress and egress schedules which satisfy said calculated cross-bar rates.

23.   (new) The method according to claim 22, further comprising the step of updating the ingress and egress schedule storing means with update messages relating to the calculated ingress and egress schedules.